

Application No. <USEPANO>

Issue Date: <ISSUEDATE>

Effective Date: <EFFECTIVEDATE>

Expiration Date: <EXPIRATIONDATE>

Ohio Environmental Protection Agency
Authorization to Discharge Under the
National Pollutant Discharge Elimination System

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq., hereinafter referred to as the "Act"), and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111),

American Energy Corporation/Century Mine
(Bennoc Refuse Disposal Area)

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the Century Mine-"Bennoc" Refuse Disposal Area located at 43521 Mayhugh Road, Washington Twp., Belmont County Ohio and discharging to unnamed tributaries of Piney Creek in accordance with the conditions specified in Parts I, II, and III of this permit.

I have determined that a lowering of water quality in unnamed tributaries and Piney Creek is necessary. In accordance with OAC 3745-1-05, this decision was reached only after examining a series of technical alternatives, reviewing social and economic issues related to the degradation, and considering all public and appropriate intergovernmental comments. The lowering of water quality is necessary to accommodate important social or economic development in the area in which the water body is located.

This permit is conditioned upon payment of applicable fees as required by Section 3745.11 of the Ohio Revised Code.

This permit and the authorization to discharge shall expire at midnight on the expiration date shown above. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information and forms as are required by the Ohio EPA no later than 180 days prior to the above date of expiration.

Scott J. Nally
Director

Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 0IL00159001. See Part II, OTHER REQUIREMENTS, for the location of the permitted outfall and the location to sample/monitor the effluent.

Table - Final Outfall - 001 - Final

Effluent Characteristic Parameter	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00045 - Total Precipitation - Inches	-	-	-	-	-	-	-	1/Day	24hr Total	All
00094 - Conductivity - Umho/Cm	-	-	-	-	-	-	-	1/Week	Grab	All
00400 - pH - S.U.	9.0	6.5	-	-	-	-	-	1 / 2 Weeks	Grab	All
00530 - Total Suspended Solids - mg/l	70	-	-	35	-	-	-	1 / 2 Weeks	Grab	All
00545 - Residue, Settleable (Volume) - mL/L	-	-	-	-	-	-	-	2/Week	Grab	All
00900 - Hardness, Total (CaCO3) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00929 - Sodium, Total (Na) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00940 - Chloride, Total - mg/l	-	-	-	-	-	-	-	1 / 2 Weeks	Grab	All
00945 - Sulfate, (SO4) - mg/l	2435	-	-	-	-	-	-	1 / 2 Weeks	Grab	All
00981 - Selenium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1 / 2 Weeks	Grab	All
01045 - Iron, Total (Fe) - ug/l	6000	-	-	3000	-	-	-	1 / 2 Weeks	Grab	All
01055 - Manganese, Total (Mn) - ug/l	4000	-	-	2000	-	-	-	1 / 2 Weeks	Grab	All
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	Total Estimate	All
50092 - Mercury, Total (Low Level) - ng/l	-	-	-	-	-	-	-	2/Year	Grab	All
70300 - Residue, Total Filterable - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All

Notes/Conditions for this outfall-see next page

Notes/Conditions for Station Number 001:

- There are no loading limits because discharge volumes vary with precipitation/snowmelt events.
- The treatment pond shall be operated as a controlled discharge and discharges shall only occur during a single 48 hr period only once during a 7 day period, unless discharges outside this range are necessary as a result of precipitation that exceeds one inch of rainfall in a 7 day period or equivalent snowmelt. 10 inches of snow is equal to one inch of rainfall for the purposes of this permit (e.g., if 5 inches of snow melts, that is equal to 1/2 inch of rainfall). Once the 48 hr. discharge period has passed, the discharge shall be stopped unless there has been precipitation or equivalent snowmelt exceeding once inch of rainfall in a 7 day period.
- Discharge volume can be estimated by calculating the stored volume discharged over the 48 hr. period and hrs. discharged each day. Feet of stored water to be discharged would have to be determined and recorded as a record required by this permit for each discharge event.
- Flow shall be monitored daily, unless the flow rate into the treatment pond after a controlled discharge event is less than 10 gpm because of weather conditions. On those days with flow less than 10 gpm into the pond, 0 mgd can be reported, but the pond's discharge outfall shall be observed at least once per week during this period.
- Monitoring and sampling shall be performed as required in the above table. If no sample is collected or data is not reported because there is no discharge or for any other reason, see Part II, Item C. for the appropriate instructions and codes to use on the monthly discharge monitoring report (DMR or eDMR).
- Alternative Effluent Limits- Discharges from this outfall may, as an option, comply with effluent limitations and monitoring requirements listed in Part II, Item H provided that all the conditions are met.

Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning on the effective date of this permit lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 0IL00159002. See Part II, OTHER REQUIREMENTS, for the location of the permitted outfall and the location to sample/monitor the effluent.

Table - Final Outfall - 002 - Final

Effluent Characteristic Parameter	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units		Loading* kg/day					Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00045 - Total Precipitation - Inches	-	-	-	-	-	-	-	1/Day	24hr Total	All
00400 - pH - S.U.	9.0	6.5	-	-	-	-	-	2/Week	Grab	All
00530 - Total Suspended Solids - mg/l	70	-	-	35	-	-	-	2/Week	Grab	All
00545 - Residue, Settleable (Volume) - mL/L	-	-	-	-	-	-	-	2/Week	Grab	All
00900 - Hardness, Total (CaCO ₃) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00929 - Sodium, Total (Na) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00940 - Chloride, Total - mg/l	-	-	-	-	-	-	-	2/Week	Grab	All
00945 - Sulfate, (SO ₄) - mg/l	2435	-	-	-	-	-	-	2/Week	Grab	All
00981 - Selenium, Total Recoverable - ug/l	-	-	-	-	-	-	-	2/Week	Grab	All
01045 - Iron, Total (Fe) - ug/l	6000	-	-	3000	-	-	-	2/Week	Grab	All
01055 - Manganese, Total (Mn) - ug/l	4000	-	-	2000	-	-	-	2/Week	Grab	All
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	Total Estimate	All
50092 - Mercury, Total (Low Level) - ng/l	-	-	-	-	-	-	-	2/Year	Grab	All
70300 - Residue, Total Filterable - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All

Notes/Conditions for this outfall-see next page

Notes/Conditions for Station Number 002:

- There are no loading limits because discharge volumes vary with precipitation/snowmelt events.
- The treatment pond shall be operated as a controlled discharge and discharges shall only occur during a single 48 hr period only once during a 7 day period, unless discharges outside this range are necessary as a result of precipitation that exceeds one inch of rainfall in a 7 day period or equivalent snowmelt. 10 inches of snow is equal to one inch of rainfall for the purposes of this permit (e.g., if 5 inches of snow melts, that is equal to 1/2 inch of rainfall). Once the 48 hr. discharge period has passed, the discharge shall be stopped unless there has been precipitation or equivalent snowmelt exceeding once inch of rainfall in a 7 day period.
- Discharge volume can be estimated by calculating the stored volume discharged over the 48 hr. period and hrs. discharged each day. Feet of stored water to be discharged would have to be determined and recorded as a record required by this permit for each discharge event.
- Flow shall be monitored daily, unless the flow rate into the treatment pond after a controlled discharge event is less than 10 gpm because of weather conditions. On those days with flow less than 10 gpm into the pond, 0 mgd can be reported, but the pond's discharge outfall shall be observed at least once per week during this period.
- Monitoring and sampling shall be performed as required in the above table. If no sample is collected or data is not reported because there is no discharge or for any other reason, see Part II, Item C. for the appropriate instructions and codes to use on the monthly discharge monitoring report (DMR or eDMR).
- Alternative Effluent Limits- Discharges from this outfall may, as an option, comply with effluent limitations and monitoring requirements listed in Part II, Item H provided that all the conditions are met.

Part I, A REQUIREMENTS FOR STORM WATER DISCHARGES ASSOCIATED
WITH INDUSTRIAL ACTIVITY AND NON-STORM WATER DISCHARGES

3. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge storm water associated with industrial activity including storm water associated with industrial activity at listed outfalls 001 and 002 and any authorized non-storm water discharges. See Part II, Item J. for requirements for Storm Water from Industrial Activity and authorized non-storm water discharges.

Part II, OTHER REQUIREMENTS

A. Descriptions and location of the permitted/authorized discharges and outfalls and sampling/monitoring stations are as follows:

Authorized Discharges, Permitted Outfalls, or Other Sampling and Monitoring Stations	Description
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0IL00159001	Final effluent from Pond 023 discharge pipe (Lat: 39N 54' 6 "; Long: 81W 1 ' 6")
0IL00159002	Final effluent from Pond 024 discharge pipe (Lat: 39N 54' 15 "; Long: 81W 0' 53")

B. This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved.

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

C. Monitoring/Reporting Requirements and Reporting Codes for Monitoring/Sampling Stations.

1) If there is no discharge during the month:

a) If using form 4500, report "AL" in the first column of the first day of the month. The AL code is only valid for DMRs submitted on paper using form 4500. Do not report "0" for flow or use any other reporting codes other than "AL".

b) If using e-DMR, DO NOT USE THE "AL" CODE or any other code or report "0" for flow. If no discharge occurred for the full monitoring period, select the "No Discharge" check box at the top of the e-DMR form and enter "No discharge during the month" in the Remarks Section.

Sign or PIN the DMR.

2) If there are no discharges on one or more required monitoring days during the month:

a) Enter the required monitoring data for the days when a discharge occurred;

b) For each required monitoring day there was no discharge, do not enter "0" for flow. Enter code "AC" for each parameter for each monitoring day the facility was not discharging.

3) If no sample is taken on a required monitoring day, use these codes if applicable:

a) Use the "AN" or the "AH" codes. Use the "AN" code to indicate when samples are not collected on days that the facility is not normally staffed. The use of this code is limited to Saturdays, Sundays, and officially recognized municipal holidays if the treatment plant is not normally staffed on those days and staff are needed for sampling. This code is only acceptable for parameters that are sampled daily, but cannot be used if continuous monitoring and recording is used, e.g. flow metering, continuous pH or temperature monitoring. For parameters sampled at a lesser frequency, the sampling date should be moved to a date when the facility is staffed. Enter code "AN" for each parameter for each monitoring day the facility was not staffed.

b) Use the "AH" code when a required sample is not taken for a reason other than one covered by another "A" code. An explanation as to why the sample was not taken must be entered as a Specific Comment for that parameter and date on eDMR or in the Remarks Section of the form 4500. Enter code "AH" for each parameter for each monitoring day a sample was not taken.

c) Data Substitution Codes (a.k.a. "A Codes") used on the Monthly Discharge Monitoring Report form or eDMR are as follows:

AA - Below Detectable Limit
AB - Analytical Data Lost
AC - Facility Not Discharging (or No Sludge Hauled)
AD - Automatic Analyzer Out of Service
AE - Analytical Data Not Valid
AF - Sample Site Inaccessible Due to Flooding or Freezing
AH - Sample Not Taken, Explanation Included
AJ - Above Range of Automatic Analyzer
AK - Biological Sample Too Numerous to Count
AL - No Discharge For the Month
AN - Sample Not Taken, Plant Not Normally Staffed (Saturdays, Sundays, and Holidays)

More detailed information about the A Codes is available at:
www.epa.state.oh.us/LinkClick.aspx?fileticket=5vr4U3Jt65A%3d&tabid=3425&mid=64

4) More information about eDMR is at:
www.epa.state.oh.us/dsw/edmr/eDMR.aspx

D. A Permit to Install (PTI) application must be submitted to Ohio EPA before installation/construction of any improvements to the treatment ponds.

E Permit limitations may be revised in order to meet water quality standards after a stream use determination and waste load allocation are completed and approved. This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable water quality effluent limitations.

F. Grab samples shall be collected at such times and locations, and in such fashion, as to be representative of the monitored discharge.

G. Outfall Signage Requirement (only applies if public has access to the point where effluent discharges into the receiving waterway)

Not later than 4 months from the effective date of this permit, the permittee shall properly maintain and post a permanent sign on the stream bank at each discharge outfall that is regulated under this NPDES permit where a sign does not currently exist.

1. The sign shall consist at a minimum of the name of the permittee and facility to which the permit was issued, the Ohio EPA permit number, and the outfall number and a contact telephone number. The information shall be printed in letters not less than two inches in height.
2. The sign shall be a minimum of 2 feet by 2 feet and shall be a minimum of 3 feet above ground level. The sign shall not be obstructed such that persons in boats or persons swimming on the river or someone fishing or walking along the shore cannot read the sign. Vegetation shall be periodically removed to keep the sign visible.
3. If the outfall is normally submerged the sign shall indicate that.
4. When an existing sign is replaced or reset, the new sign shall comply with the requirements of this section.
5. The Director may alter the dimension requirements of the signs, to provide more information and better legibility. In addition, the Director may alter the compliance time to install the sign due to weather conditions, or other considerations, that would cause a delay in getting signs posted.

H. The discharges from outfalls 0IL00159001 and ..002 are eligible for the alternative effluent limits listed in section (1) below provided that the applicability and submission requirements listed in section (2) below are met.

1. Alternative Effluent Limits for outfall 001 and 002

a. If the discharge or increase in the volume of the discharge is caused by precipitation within any 24 hr. period greater than the 1 year, 24 hour precipitation event (or snowmelt of equivalent volume) but less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume), the alternative limits (with monitoring/reporting requirements) are as follows:

EFFLUENT CHARACTERISTIC		DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
Reporting Code/Units	Parameter	Concentration		Measurement Frequency	Sample Type
		Other Units (Specify)	30 Day Daily		
00045 IN	Total Precipitation	-	-	Daily	24 Hr. Total
00400 S.U.	pH	6.5 to 9.0	at all times	1/Month	Grab
00530 mg/l	Total Suspended Solids	-	-	1/Month	Grab
00545 ml/l	Residue, Settleable	-	0.5	1/Month	Grab
01045 ug/l	Iron, Total (Fe)	-	-	1/Month	Grab
01055 ug/l	Manganese, Total (Mn)	-	-	1/Month	Grab
50050 MGD	Flow Rate	-	-	Daily	24 Hr. Total
00945 mg/l	Sulfate	-	2435	Daily	Grab

b. If the discharge or increase in the volume of the discharge is caused by precipitation greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume), the alternative limits (with monitoring/reporting requirements) are as follows:

Reporting Code/Units	Parameter	Concentration		Measurement Frequency	Sample Type
		Other Units (Specify)	30 Day Daily		
00045 IN	Total Precipitation	-	-	Daily	24 Hr. Total
00400 S.U.	pH	6.5 to 9.0	at all times	1/Month	Grab
00530 mg/l	Total Suspended Solids	-	-	1/Month	Grab
00545 ml/l	Residue, Settleable	-	-	1/Month	Grab
01045 ug/l	Iron, Total (Fe)	-	-	1/Month	Grab
01055 ug/l	Manganese, Total (Mn)	-	-	1/Month	Grab
50050 MGD	Flow Rate	-	-	Daily	24 Hr. Total
00945 mg/l	Sulfate	-	2435	Daily	Grab

2. Applicability and Submission Requirements

a. The samples of the discharge for all parameters listed are collected during, or within 24 hours after the applicable precipitation event.

b. The operator proves that the discharge or the increase in the discharge was caused by the applicable precipitation event. The following information must be submitted by the permittee as proof of qualification for the alternative effluent limitations:

- i. A statement of the precipitation event for which the alternative limits are being sought and the amount of rainfall specified for that precipitation event as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Atlas of the United States", May 1961, or equivalent regional rainfall probability information developed therefrom;
 - ii. The date, duration (time begin/time end), and total 24-hour accumulation (inches), of the precipitation which caused the discharge or increase in volume of the discharge; and
 - iii. The date and time grab samples were collected.
- c. The permittee should report "AC" in the appropriate location on the Discharge Monitoring Report (DMR) Form 4500 where the data would have gone if alternative limits were not applicable. The information required above in Part II, Item (D)(1)(b) should be included in the "Additional Remarks" section of the DMR form.
- I. The permittee shall use either EPA Method 1631 or EPA Method 245.7 promulgated under 40 CFR 136 to comply with the effluent mercury monitoring requirements of this permit.

J. STORM WATER ASSOCIATED WITH INDUSTRIAL ACTIVITY AND NON-STORM WATER DISCHARGES

During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge storm water associated with industrial activity and authorized non-storm water discharges.

Authorized non-storm water discharges are from fire fighting activities; fire hydrant flushings; potable water sources including waterline flushings; irrigation drainage; lawn watering; routine external building washdown which does not use detergents; pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred and where detergents are not used; air conditioning condensate; boiler condensate; springs; groundwater; and foundation or footing drains from various outfalls.

The permittee must still meet the requirements of Part III, Item 2 for the above non-storm water discharges.

This permit does not authorize the discharge of storm water from construction activity disturbing over one (1) acre.

NOTE: The permit requirements below apply unless the permittee has qualified for a no-exposure certification. For information on obtaining a no-exposure certification go to www.epa.state.oh.us/dsw/storm/stormform.aspx#no_exposure_certification

Permit requirements:

1. The permittee shall prepare, or update as appropriate, a storm water pollution prevention plan (SWPPP) in accordance with USEPA Guidance "Developing Your Stormwater Pollution Prevention Plan: A Guide for Industrial Operators, February 2009". A copy is at http://www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf. For additional information on storm water management for industrial activities and developing storm water pollution prevention plans and best management practices go to the USEPA's storm water publications website; http://cfpub.epa.gov/npdes/docs.cfm?program_id=6&view=allprog&sort=name. Documents are in alphabetical order.

a. The SWPPP:

- i. Shall be prepared within six months of the effective date of this permit (and updated as appropriate)
- ii. Shall provide for implementation and compliance with the terms of the plan within twelve months of the effective date of this permit.

b. Signature and Plan Review:

- i. The plan shall be signed and certified by the same person authorized to sign the NPDES permit applications in accordance with the requirements of 40 CFR 122.22. The plan shall be retained on-site at the facility which generates the storm water discharge.
- ii. The permittee shall make plans available upon request to the Ohio EPA Director, or authorized representative or Regional Administrator of U.S. EPA, or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system, to the operator of the municipal system.
- iii. The Director may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Within 30 days of such notification from the Director, the permittee shall make the required changes to the plan and shall submit to the Director a written certification that the requested changes have been made.

2. The plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. The permittee shall implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

3. The permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharges associated with industrial activity and evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate and properly implemented in accordance with the SWPPP and whether additional control measures are needed. This information shall be compiled in an annual report. The annual report shall be completed 30 days after the annual inspection is completed. The Report must also identify any incidents of non-compliance and contain a certification regarding the facility's status of compliance the SWPPP and this Permit.
4. The permittee shall maintain the annual report and certification for a period of three years.
5. If as a result of the inspections additional control measures are determined to be needed, or if the SWPPP proves to be ineffective in eliminating or significantly minimizing the discharge of pollutants or otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity at the facility, the permittee shall amend the plan. The permittee shall also amend the plan whenever there is a change in design, construction, operation or maintenance that has a significant effect on the potential for the discharge of pollutants to the waters of the State.
6. The inspection reports and certifications shall be signed in accordance with 40 CFR Section 122.22.